

## Issues in Mawo Qiang Phonology\*

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This paper provides a critical review of the analysis of Northern Qiang phonology (Mawo dialect), as presented in two major recent publications on Qiang linguistics. A number of problematic areas will be discussed, including the status of the glides, the vowel *e*, and certain types of consonant clusters, as well as the global issue of how phonology should properly reflect the interactions between stress and certain weakening processes. Analyses which seem simpler or more realistic will be offered; directions for further field investigation will also be suggested in the more dubious cases.

Key words: Tibeto-Burman, Qiang, phonology

### 1. Introduction

The Qiang language of northwestern Sichuan is the best-known representative of the Qiangic subgroup in the Tibeto-Burman family. Based on an extensive linguistic survey of the Qiang-speaking country undertaken in 1956 through 1960, Chinese scholars have proposed a northern and a southern ‘dialect’ of Qiang, which are actually divergent enough to be regarded as separate languages.<sup>1</sup> Unlike Southern Qiang (hereafter SQ), Northern Qiang (hereafter NQ) is internally homogeneous, consisting of five mutually intelligible ‘subdialects’ with a total of around 70,000 speakers. Sporadic forms and short wordlists of NQ (known, for instance, as \_\_\_\_\_ in Hodgson 1874) can be gleaned from earlier publications, but the first phonetically accurate record of Northern Qiang did not come out

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\* This paper is dedicated to Prof. Fengfu Tsao, whose generous support and guidance initiated me into the fascinating field of Tibetan and Qiang linguistics while I was studying at the Graduate Institute of English, National Taiwan Normal University. I owe Prof. Tsao an immense debt of gratitude for giving me a smooth start in my career as a Tibeto-Burmanist. The helpful comments from the two anonymous reviewers of this paper are also highly appreciated.

<sup>1</sup> As a striking indication of the great internal diversity within SQ, the lexical cognacy shared by the two SQ dialects Taoping and Lungchi is so low (64.2%) that this figure is close to the cognacy rate between a SQ (Taoping) and a NQ subdialect (Mawo): 60.5%.

until as late as 1981, when Sun Hongkai published *Qiangyu Jianzhi* (hereafter *QYJZ*) in which a 35-page synopsis of NQ phonology is included, in addition to a short vocabulary of about 1,000 words in the appendix of the book. The variety of NQ discussed in *QYJZ* is that of Mawo ( ), the traditional cultural and political center of the Heishui Qiang country. This is also the variety treated by most subsequent papers on NQ by Liu Guangkun: Liu 1981, Liu 1984, and especially Liu<sup>2</sup> 1998 (hereafter *MQY*), a book-length study devoted to Mawo Qiang.

From March 1986 through July 1987, I studied Mawo Qiang with an expatriate Heishui Tibetan residing in Taiwan.<sup>3</sup> *QYJZ* became available to me in the course of this endeavor, and I happily used it as a handy reference. This offered a unique opportunity for me to compare my consultant's Mawo forms with those given in *QYJZ* and to evaluate its data and phonological analysis. On a recent field trip to China, I also had the good fortune to consult with a younger nativer from Mawo. These first-hand experiences with the language have made it possible for me to notice some analytical problems in the Mawo phonological system posited in *QYJZ*.<sup>4</sup> Furthermore, since the recently published *MQY* essentially follows the analysis of *QYJZ*, the same problems are carried over into the latter work.<sup>5</sup>

In what follows, I will discuss some of the phonological issues found in the two sources on Mawo Qiang. Where appropriate, alternative analyses which seem to me simpler or more realistic will be offered, and,

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<sup>2</sup> Liu Guangkun, Sun Hongkai's wife and long-time collaborator in Qiang linguistics, draws from the same body of Mawo data as *QYJZ*. More recent work on NQ such as Huang Bufan 1987, to appear, and LaPolla (Ms.) deal with its Yadu subdialect, the Qugu variety of which now replaces Mawo as the standard pan-Qiang dialect for the Romanized Qiang script.

<sup>3</sup> Yeshe Bstan'dzin, my Mawo consultant in 1986-1987 was born at Weigu ( ) Township but brought up at Mawo Township. Although he had left Mawo for Taiwan as a young adult, he had until recently continued to converse in Qiang with his colleague and compatriot, the late Sonam Bstan'dzin. Keji, the Mawo speaker I met this year in Sichuan, is a true native of Mawo Township.

<sup>4</sup> The appendix Mawo vocabulary of about 3,000 words in *MQY*, useful as it is, leaves much to be desired. Some lexical items are listed with incorrect Chinese glosses (e.g. *MQY* p. 294. / / is glossed 'ape' but really means 'wild man (legendary beast)'; / / is glossed 'panda' but really means 'brown bear'; / / is glossed 'wild horse; wild mule' but really means 'goral') or with dialectal Chinese names (e.g. on the same page, / / is translated by the local Sichuanese term rather than the standard Chinese name 'hog badger'; / / is translated by the local Sichuanese term rather than standard Chinese 'marmot'. It should also be noted that verbs in the vocabulary are sometimes given in inflected forms (e.g. on p. 339. of *MQY* the stative verb 'to be dense' appears in an inflected form / ě / with a third-person single ending /-i/; and on p. 334 the verb 'to finish' appears in an inflected form / ě / with a first-person single index /-a/).

<sup>5</sup> Unless otherwise noted, my comments on the phonological system of *QYJZ* apply also to *MQY*.

in the less straightforward cases, directions for further investigation will also be suggested.

## 2. Glides

The glides or semivowels  $w$  and  $y$  are among the most common sounds in the world's languages, but whether a language has them as phonemes depends on *phonological* considerations. We usually give glides phonemic status for several reasons. First, glides may function like regular consonantal phonemes in the target language in their ability to differentiate minimal pairs like  $\langle w \rangle$  or  $\langle y \rangle$  (cf. English *ear* vs. *year*, *ooze* vs. *woos*; Vayu 'to say' vs. 'to laugh' (Michailovsky 1981); French  $\langle w \rangle$  vs.  $\langle y \rangle$ ,  $\langle w \rangle$  vs.  $\langle y \rangle$ ).<sup>6</sup> Glides may also pattern like other consonants in phonological rules (e.g. English *a year* but *an ear*) or in distribution (e.g. Garo /  $w$  /; Burling 1961). Further, recognizing phonemic glides may enable phonologists to posit simpler vowel systems and syllable canon by reinterpreting phonetic diphthongs as underlying GV or VG sequences (G = glide).

In *QYJZ*,  $w$  and  $y$  are included in the Mawo initial consonantal system without any justification. As far as I can tell, they are useful entities for the authors chiefly because they help distinguish between disyllables and diphthongs *in transcription* so that, for instance, 'to plow' is a monosyllable while 'voice' has two syllables. On the other hand, *QYJZ* also recognizes a whole array of underlying complex vowels:<sup>7</sup>

(1)

Positing both the glides and the vowel clusters as underlying entities is a notational extravagance that linguists upholding Occam's razor should avoid. Since all these sequences contain the high on/offglide(s)  $w$  or  $y$ , I suggest that we get more mileage out of the glides

<sup>6</sup> One anonymous reviewer of this paper points out that a similar contrast is also true of Mawo Qiang.

<sup>7</sup> The vowel sequences  $\langle w \rangle$  and  $\langle y \rangle$  will not be taken into consideration as they are found in loan words only.

/ / and / / by interpreting these diphthongs as GV and VG. This means expanding somewhat the inventory of consonant clusters, but it should be a small price to pay for dispensing with all underlying vowel sequences. In fact, another bonus of the proposed phonemic interpretation is that forms like ‘dog’, rewritten now as  $\check{d}$   $\check{g}$ , seem more readily comparable with Tibeto-Burman cognates, such as Written Burmese  $\check{d}$   $\check{g}$ .<sup>8</sup>

### 3. The Preinitial System

In Mawo, and NQ in general, many simplex consonants may combine with a set of preinitials to form an impressive repertoire of initial clusters. In *QYJZ*, such clusters are classified into two types. We focus here only on the so-called ‘Type 1’ clusters, i.e. those clusters other than stop + fricative combinations.

The preinitials that form clusters in this category, excluding the marginal  $\check{h}$  - and the voiceless retroflexed spirant  $\check{r}$  to which we will turn later, can be arranged into the following voicing-based pairs:

(2)	VOICED	VOICELESS
	$\check{b}$	$\check{p}$
	$\check{d}$	$\check{t}$
	$\check{g}$	
	$\check{z}$	$\check{c}$

A four-way distinction in articulation-place and manner shown in (2) seems incontestable, and minimal or near minimal pairs can easily be found to prove this. The question is: is there a contrast of voicing here as well, such that we need to posit all eight as phonemic preinitials?

Concerning the first two pairs, voicing is indeed distinctive, since all four preinitials contrast before the initial

(3)	‘to turn (body)’	‘mud’
	‘wheat’	‘to break (e.g. a stick)’

This voicing opposition is, however, neutralized before the other initials, where the

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<sup>8</sup> In the Tibetan and Burmese scripts, incidentally, the glides  $\check{d}$   $\check{g}$  and  $\check{t}$   $\check{c}$  are also represented by consonantal signs and treated as part of the syllable initial.

preinitials agree in voicing to the following consonant, as predicted by universal phonetic tendencies, e.g.

- (4) 'to be enough'
- 'gall'; 'louse'
- 'star'; 'bell'
- 'six'

Turning to the - : - pair, a different situation obtains from the following distribution chart (QYJZ: 27):

(5)

	U'		U'		U'		U'	U'	U'	U'	U'	U'	U'
		U'		U'		U'							

Here clusters comprising  $\check{I}$  - and obstruents always have identical voicing, whereas before voiced sonorants, only - is found. The author's reason for considering the contextually determined preinitial - preinitial on a par with - might be that once a phoneme is established (/ / is without doubt a phoneme in Mawo), it must be treated as such everywhere, even in positions of neutralization. This dubious practice of 'once a phoneme, always a phoneme' is not even followed with consistency, for in the same book the Taoping (SQ) preinitial is represented by a single 'archiphoneme'  $\check{E}$  (QYJZ:13).

The relevant portion of the QYJZ distribution chart for the rhotic preinitials -, -, and  $\check{E}$  is given as follows:

(6)

	+	+		+	+	+	+	+	+	+		+	+	+	+	+	+
	+		+		+			+									
	+				+		+					+					

We observe in (6) that - and - are almost in complementary distribution, with - before voiced consonants and - before voiceless ones. Unfortunately, QYJZ gives clusters

of *r*- followed by voiceless initials as well: -, -, -, and even -. If we turn to the actual examples used to illustrate these clusters, we realize that such clusters are restricted to occur word-medially after a vowel only, e.g. (*QYJZ*: 28)

- (7) 'butler'  
 'angelica'  
 'hole in tent for the tent string to go through'  
 'large cymbal'

At issue here is clearly phonotactics at different positions in the word. Failing to keep word-initial and word-medial clusters straight not only introduces unnecessary complications in the phonotactic statements but obscures important generalizations, e.g. aspirated consonants are not allowed in word-initial clusters in this language. The alleged contrast between - and - in initial clusters is therefore specious, and only an underlying - preinitial needs to be recognized, with its voiceless positional variant [ ] derived by a rule that makes the rhotic preinitial agree in voicing to the following consonant.

We are ready now to discuss the status of the preinitial -, which shares articulatory and acoustic characteristics with the rhotics. Referring back to (6), we see that - can cluster with , , and ; in other words, Mawo appears to contrast - and - before and in word-initial clusters. However, all examples of the - cluster cited in *QYJZ* and *MQY* show the cluster in question at word-medial position (e.g. 'a religious instrument'); likewise, - always occurs word-initially (e.g. 'millet'). *QYJZ* does lists one pair that shows word-initial - and. - potentially in contrast:

- (8) '(as of liquids) to be thick'  
 'butter lamp'<sup>9</sup>

If one limits oneself to using *QYJZ* and *MQY* as the only sources of data, there is little choice but to accept bona fide that - is indeed a distinct preinitial in Mawo, on the strength of pairs like (8). My Mawo consultants, on the other hand, make no distinction between - and - at the preinitial position, where only one rhotic /r-/ is required, the actual phonetic realizations are determined by specific phonological environments, as in

- (9) /r-/ -> [ ]~[ÿ] (before voiced consonants)

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<sup>9</sup> The gloss my consultants give for this word is 'small silver cup on the offering altar'.

- [ ɣ ] / (before *k*-; = voiceless rhotacized velar spirant)  
 [ ɣ̥ ] / (before *q*-; = voiceless rhotacized uvular spirant)  
 [ ɣ̥ ] ~ [ ɣ̥ ] (before other voiceless consonants)

Not wanting to prejudge the issue in the face of conflicting elicitations by different linguists, I suggest that the phonemic status of the preinitials *ɣ* and *ɣ̥* (an allophone of /r/) remain a moot point, pending further double-checking with other Mawo speakers.

To conclude this section, the system of preinitials posited by *QYJZ* can be significantly reduced to a set of just eight (or maybe even seven) distinctive preinitials: *m*-, *x*-, *ɣ̥*ʰ, *ɣ̥*ʰ, *ɣ̥*ʰ, *ɣ̥*ʰ, *ɣ̥*ʰ, *ɣ̥*ʰ, *ɣ̥*ʰ.

## 4. The Vowel *e*

*QYJZ* posits the following vocalic system for Mawo:<sup>10</sup>

(10) (a) short vowels

(b) long vowels

Without a corresponding / *e* / vowel in the system, the mid front vowel / *e* / sticks out like a sore thumb. Although we do find languages with unbalanced vowel systems like this (e.g. the Turkic language Chuvash), the situation is unusual enough to call for scrutiny. To achieve this end, I glean representative examples of the suspicious *e* vowel from *QYJZ* and arrange them into the following groups:

- |      |     |               |                              |
|------|-----|---------------|------------------------------|
| (11) | (a) | ‘urn’         | ‘lid’                        |
|      |     | ‘to split’    | ‘box’                        |
|      |     | ‘needle’      | ‘species of poisonous plant’ |
|      |     | ‘lean (meat)’ | ‘sparrow’                    |

<sup>10</sup> Retroflexed or rhotacized vowels, symbolized herein by a superscript *ɣ̥*, are not discussed in this paper.

(b)	‘eleven’	‘thirteen’
	‘one day’	‘one <i>kuai</i> , a monetary unit’
	‘week’	‘cinnabar’
	‘aunt’	‘father’s elder brother’
(c)	‘plate’	‘pestle’
	ɣ̣ ‘next year’	ɣ̣ ‘to bequeath’
	‘hoe’	‘to be hot’
(d)	‘north’	‘cup’
	‘vehicle’	‘sugarcane’
	‘commune’	‘revolution’

From the data in 11a, one may surmise that the phonetic realization [ ] is nothing else than a predictable positional variant of / / occurring after a uvular initial, which causes the high vowel to lower. This is confirmed by the observation that the surface vowel quality [ ] does not occur in this particular phonological environment.

Group 11b words are of more interest since rules of internal sandhi are at work. The forms for ‘eleven’ and ‘thirteen’ are derived respectively from - ‘ten’ plus - ‘one’ and - ‘three’ (cf. ‘twelve’, ‘seventeen’, ‘sixteen’ etc.). The forms and consist of the numeral ‘one’ plus the classifiers ‘day’ and ‘a monetary unit’. The next two words in (b) are compounds comprising ‘seven’ plus ‘day’, and ‘clay’ plus ‘to be red’. As for ‘aunt’ and ‘father’s elder brother’, they contain the kinship prefix - (cf.  $\check{E}$  ‘grandfather’,  $\check{E}$  ‘mother’).<sup>11</sup> Since all these instances of are secondary, i.e. derivable automatically from either the / / or / / phonemes in specific internal sandhi contexts, they cannot be used to prove the phonemic status of  $\check{e}$ .

Group 11c words seem somewhat more problematic because they cannot be explained away in the same fashion as the cases in 11a and 11b. Let’s first look at  $\check{Y}$  ‘next year’,  $\check{Y}$  ‘to bequeath’, and ‘hoe’. I would like to point out, first of all, that there is no real phonetic difference in Mawo between the sequences  $\check{Y}$  and at all. That is, when a retroflexed vowel is followed by a tautosyllabic plain vowel, retroflexion simply spread across into the next syllable, and a retroflexed long vowel is produced. Evidence of

<sup>11</sup> Some forms show an / / alternant under specific assimilatory conditions. See *QYJZ*: 49–54, under the heading of ‘vowel harmony’.



this is readily attested in *QYJZ*, consider for example ‘back of foot’, a compound composed of ‘foot’ plus ʏ ‘back’, and the conjugated verb form ‘I will curse’, from ‘to curse’ plus - (first person singular index) and - ‘irrealis suffix’. This reinterpretation not only brings these three forms in line with each other, but gives us the extra bonus of accounting for an apparent gap in the Mawo vowel system in *QYJZ*: 30. Here, we are given a long retroflexed vowel,<sup>12</sup> but no corresponding . Thus, we may safely reinterpret what is written ʏ and in *QYJZ* and *MQY* as underlying / /; the perceptually lowered allophonic variant [ ] may be accounted for by the universal phonetic tendency for vowels to lower before rhotics (Lindau 1985: 158).

Regarding the two forms with *e* after the initial consonant , ‘a type of plate’ and ‘pestle’, my Mawo consultants insist on the pronunciation [ ], strongly rejecting any rendition without the labial glide (i.e. \*[ ], \*[bE], etc.). I suggest, therefore, that the rhyme involved here should be - . This treatment, aside from being more realistic, helps us to fill another apparent gap in the vowel system, for *QYJZ*: 32–33 posits a retroflexed diphthong, but no corresponding plain . I do not know what to make of the remaining form ‘to be hot’, but the form I recorded from my consultant is Ǟ (- being a third person singular ending). That the word is *reduplicated* provides us with a clue to the identity of the real root, namely (cf. Ǟ ‘to be narrow’, Ǟ ‘to be fast’). Could it be that is an impressionistic rendering of underlying Ǟ ?

The final group 11d contains recent loanwords from Sichuanese Mandarin. According to my consultants, none of the words listed here were known at Mawo until the Chinese came in the 1950s. The question now is how likely it is for new phonemes (in this case ) to stabilize and be integrated fully into the native vocalic system, given the limited time span since the introduction of these borrowings.

To summarize, *QYJZ* fails to establish as a distinct phoneme in the *native* sound system; furthermore, more research is in order before we can be sure whether has been firmly imported into the contemporary Mawo phonology from Chinese borrowings.<sup>13</sup>

## 5. Stress

As demonstrated in *QYJZ*:7 and *MQY*:55, distinctive accent is one of the characteristic

<sup>12</sup> The long vowel was omitted by mistake on the vowel chart on *QYJZ*: 30, but put black into the chart in *MQY*: 38.

<sup>13</sup> It is entirely possible for new phonemes to be added to the phonological system through borrowing. A case in point is the phoneme / / (distinct from both / / and / /) in the Ndzorge variety of Amdo Tibetan (personal research), which appears to be introduced into the language through a few loanwords from Mongolian.

features of NQ. Since the unaccented syllables in NQ display signs of phonological weakening, one may assume that the accentual phenomena under investigation should involve stress, rather than pitch, accent.<sup>14</sup> At least some varieties of NQ use stress placement to distinguish lexical meanings, as seen in minimal pairs like:

- (12)                    ‘ear’  
                             ‘pillow’

However, after giving a number of words with the stress on different syllables to show the unpredictability of lexical stress in Mawo, the author gives the reason why he chooses to leave stress unmarked elsewhere in the book:

“...word pairs distinguished solely by stress placement are extremely few. As stress plays a minor role in the phonemic system of Mawo, except for example words and sentences in the sections dealing with stress, stress in general is not indicated in this book.” (QYJZ: 41; translation mine).

The decision not to overtly represent stress in the *QYJZ* Mawo data turns out to have quite serious consequences on the phonological analysis. First, in a strictly phonemic notation, any significant feature that is unpredictable, regardless of function yield, should be lexically marked. That is why English phonologies and dictionaries always overtly mark stress, even though minimal pairs of stress are just as difficult to find in English. Of even greater concern is the loss of generalizations and explanatory power with Mawo phonological processes which directly involve stress. I will discuss two such processes, consonant lenition and vowel reduction (apocopy and devoicing).

## 5.1 Stress and Consonant Lenition

There is a set of productive lenition rules in Mawo which turn underlying word-medial, intervocalic stops and affricates in unstressed syllables into spirants and rhotics (*QYJZ*: 43–9):<sup>15</sup>

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<sup>14</sup> Some neighboring Tibeto-Burman languages, such as Caodeng rGyalrong, possess genuine pitch accent systems of which the major phonetic cue is a distinctive drop of pitch.

<sup>15</sup> Furthermore, a segment does not undergo lenition if the preceding vowel is long, except in the case of reduplicated disyllables.

UNDERLYING                      OUTPUT OF LENITION  
(13)

$\tilde{f}$

When the output phones from (13) are independent phonemes, *QYJZ* chooses to represent, for example, the word ‘smoke’ ( ‘fire’ plus ‘smoke’) as rather than , i.e. without indicating stress but with the derived allomorph -. This analysis is at least understandable since / / is a phoneme in Mawo, and Mawo forms in *QYJZ* are generally (not always!) given in taxonomic phonemic representation. It however gets into trouble when the output of the weakening rule happens to be less than full-fledged phonemes. The segment in the Mawo consonant system (*QYJZ*: 23) may very well be a case in point. Based on my own field experiences with Mawo, and above all on the fact that throughout the book *QYJZ* fails to cite one single example of *word-initial* in potential contrast with either - or -,<sup>16</sup> I believe that the voiced bilabial spirant [ ] is no more than a positional variant of / /, occurring only and always in the weakening context described above. In fact, the word-internal lenition rule in (13) works just like the famous cluster voicing assimilation rule in Russian (Halle 1959), which governs both phonemic alternations (/ / and / / in Russian; / / and / / in Mawo) and allophonic alternations ([ ] and / / in Russian; [ ] and / / in Mawo). As a consequence of not lexically marking the location of the stress, then, *QYJZ* pays the price of ‘mixing levels’, i.e. including subphonemic elements in his supposedly straightforward taxonomic representations, e.g. ‘maiden’ from ‘female’ plus

<sup>16</sup> In all the forms with in *QYJZ*, including the very examples used to illustrate as an initial consonant (p.25), occurs word-medially between vowels.

‘big’;            ‘to rob’ a reduplicated stem from    ).<sup>17</sup> Other spurious segments which may eventually be eliminated from the inventory of contrastive consonants include    and    , but more research is required in this area.

## 5.2 Stress and Vowel Reduction

Vowel reduction in unstressed syllables is another important type of phonological alternations determined by stress. Specifically, unstressed vowels    ,    ,    , and    are elided; before elision, the rhotacized vowel    and the high back rounded vowel    leave behind distinctive features of respectively rhotacization and labialization. In my analysis, this state of affairs is accounted for by stress-determined rules of reduction, which apply to *unreduced* underlying morpheme shapes with fully specified accentual information, as shown in these examples:

(14) UNDERLYING	PRONOUNCED
$\tilde{E}$ ‘one month’ (    ‘one’ +    ‘month’)	
$\tilde{E}$ ‘whistle’ (    ‘whistle’ +    ‘to blow’)	
$\dot{Y}$ $\tilde{E}$ ‘stallion’ (< $\dot{Y}$ ‘horse’ +    ‘male’)	$\dot{Y}$
$\tilde{E}$ ‘watery soup’ (<    ‘water’ +    ‘watery’)	

The representation of the effects of segmental reduction under weak stress in *QYJZ* is flawed on many counts. *QYJZ*’s greatest error in this respect, as we have noted earlier, is its failure to overtly indicate accent. This has prevented the authors from utilizing accent to give a consistent, revealing account of vowel reduction and consonant lenition. Instead, *QYJZ* resorts to a piecemeal treatment of the phenomena, as if unconnected processes were involved. With plain vowel elision involving the vowels / / and / /, the deleted vowels are usually simply not shown in the lexical forms in *QYJZ*; e.g.     $\tilde{E}$     ‘one month’ shows up simply as the surface form    . On the other hand, cases of vowel deletion with concomitant rhotacization and labialization are regarded as a kind of *vowel devoicing*; e.g. the words    ‘ear’<sup>18</sup> and     $\tilde{E}$     ‘watery soup’ are represented respectively as

<sup>17</sup> Many verbs in Mawo occur in reduplicated forms, cf.    ‘to lean’;    ‘to dig’;    ‘to weave’;    ‘to weigh’;    ‘to paste’;    ‘to fly’;    ‘to scoop up’.

<sup>18</sup> Again, this analysis is not carefully and consistently executed, resulting in loss of morphological identity. For example, the Mawo lexicon appended to *MQY* contains the words  $\dot{Y}$     ‘male horse’,    ‘male yak’, but    ‘male dzo’. In fact, all three animal terms contain the unstressed component morpheme  $\tilde{E}$     ‘male bovine’. In my phonemic notation, they should be rather represented as  $\dot{Y}$     ‘male horse’,    ‘male

and  $\check{E}$ . Voiceless vowels are extremely marked in the world's languages, except as surface phonetic phenomena (Ladefoged and Maddieson 1996: 315). The use of such typologically odd entities in *lexical* representations is thus questionable. First of all, underlying representations of lexemes should involve only distinctive features, not predictable, contingent features produced by applying natural phonological rules. *QYJZ* not only complicates the vowel inventory unnecessarily with recognizing a typologically rare vowel type, but uses voiceless vowels purely like diacritics for denoting unstressed labialized or rhotacized vowels, when the syllable in question contains a voiced onset (e.g.  $\check{E}$  'rent', *QYJZ*: 54) where vowel devoicing is not phonetically plausible.<sup>19</sup> Worse, one wonders how the transcription system of *QYJZ* is capable of keeping apart words ending in vowels that never reduce (say, -a) but contrasting minimally by stress placement (a hypothetical example would be  $\check{E}$  vs.  $\check{E}$ )?

Furthermore, avoiding accent-marking in lexical representations sometimes leads to obfuscated morpheme identity, an apt example being the form 'ribs' (*MQY*: 299) which in all likelihood contains the unstressed morpheme  $\check{Y}$  'bone' and should be represented more revealingly as an underlying disyllable  $\check{E}\check{Y}$  !

Summing up, if stress is lexically distinctive and variable in Mawo, as *QYJZ* claims to be the case, then unpredictable stress placement must be fully marked in lexical entries, which for optimally transparent morphemic representation should be composed of full (unreduced) forms. On the other hand, such phonological processes as vowel drop and consonant lenition should be attributed correctly and *uniformly* to weakening caused by destressing.

## 6. Conclusions

This paper discusses a few problematic areas in Mawo Qiang phonology as presented in two major recent publications on Qiang linguistics: *QYJZ* and its expanded sequel *MQY*. Despite their typographical errors<sup>20</sup> and analytical desiderata, *QYJZ* and *MQY* have provided

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yak', and 'male dzo'.

<sup>19</sup> For vowel devoicing to occur in languages like Japanese that do have voiceless vowels at the allophonic level, the syllables in question must contain *voiceless* onsets.

<sup>20</sup> The following sample of the typos and inconsistencies should suffice to remind the reader of the need of caution while using *QYJZ*: (a) The word for the adverb 'too, also' is given as  $\check{e}$  on p.219, but no mention is made of syllabic consonants in the main body of Mawo phonology; (b) Despite the statement '...when the vowel occurs alone as rhymes, it tends to be pronounced as ' (p.31), *both* variants are posited in the phonemic vowel system; individual forms are cited sometimes with  $\check{E}$ , sometimes with  $\check{E}$ , and sometimes even both, e.g. (p.202), (p.28) 'younger sister'; (c) The same form cited at different places of the

the necessary groundwork for further comparative explorations in Qiangic (LaPolla ms.; Lien ms.; Evans 2001), and will no doubt remain among our primary data banks on the important Qiang language.

This critique is written in the hope of supplying some suggestions on how to best benefit from, and improve on, these important sources; it should in no way detract from our esteem and appreciation to the authors for making their valuable work accessible to the Tibeto-Burman community.

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book may have conflicting glosses. e.g.  $\dot{y}$  'shank' (p.38), but 'thigh' (p.200); (d) Misprints and inconsistencies can be found on almost every page ( (p.28), (p.197) 'rabbit'; (p.32), (p.206) 'shadow'; (p.37), (p.216) 'to be bitter'; (p.38), (p.215) 'to be straight', (p.193), (p.208) 'to connect'; (p.39), (p.216) 'to be tender'; (p.38), (p.202) 'beam'; (p.39), (p.210) 'to put'; (p.47), (p.180) 'kneading trough'; (p.53), (p.207) 'to throw'. Many (but not all) such errors are corrected in *MQY*, but new inconsistencies creep in, e.g. (p.57), (p.300) 'bridge'; (p.42), (p.311) 'butter'.

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## 麻窩羌語音系上的幾個問題

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近年來，有兩種重要羌語語言學著作《羌語簡志》、《麻窩羌語研究》問世。本文根據對羌語實際調查的認識，對其北部羌語麻窩話的音系分析提出了評論。文中討論的問題包括滑音、元音 *e*、複輔音聲母中前置輔音之音系地位，以及強弱重音與弱化性語音規律之關係。針對上述分析問題，本文提出了較簡單或更恰當之替代分析方案，牽涉語料本身之疑難處，也作出進一步田調方向之建議。

關鍵詞：藏緬語、羌語、音系學